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Mineral Industry Surveys

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LEAD IN FEBRUARY 2004

Domestic mine production, based on the net quantity of lead recovered from concentrate, decreased by 3% in February compared with production in January, according to the U.S. Geological Survey. Total mine production through the first 2 months of 2004 was down by 11% compared with that of the same period in 2003. Secondary refinery production and reported consumption decreased by 2% and 1%, respectively, in February compared with that of the previous month. Total secondary production and reported consumption through the first 2 months of 2004 were up by about 3% and 2%, respectively, compared with that of the same period in 2003.

According to the Platts Metals Week published quotations for February, the average North American producer price and the average London Metal Exchange Ltd. (LME) cash price (U.S. dollars) increased by 5.4% and 14.5%, respectively.

The LME lead price continued to rise in February, reaching its highest level since March 1990. Profit taking by investment fund buyers decreased the price somewhat after peaking on February 26, but the still relatively high price remained a deterrent to any appreciable purchasing by lead consumers. The average LME lead price for February 2004 was up nearly 78% compared with that of February 2003. The rate of decline in LME stocks slowed significantly in February 2004, showing signs of resistance to further decline at a level of about 73,000 metric tons (t). LME stocks have dropped by nearly 123,000 t since August 2002. Demand for refined lead in North America began to show signs of strengthening in the first months of 2004, buoyed by a growing optimism for further economic recovery in the United States. Sales of new vehicles were up by 4.8% in February 2004 compared with sales in February 2003. A renewal of modest capital investment in the industrial battery end use sector also was evident. In Europe, lead demand was reported to have shown some signs of easing, particularly in the replacement automotive battery sector, as the traditionally slower spring season was about to begin. Supplies of refined lead remained tight in Europe but could be eased in the coming months with the impending reopening of Glencore International AG's Porto Vesme smelter facilities in Sardinia, Italy (CRU International Ltd., 2004).

The National Defense Stockpile aggregated cash disposal (sale) of lead in February under the monthly Basic Ordering Agreement, DLA-Lead-005, was 3,850 t (4,244 short tons). Sales of lead in the first 5 months of fiscal year 2004 (October 2003 through February 2004) totaled 25,767 t (28,403 short tons) (Defense National Stockpile Center, 2004).

The U.S. Environmental Protection Agency (EPA) announced its Integrated Risk Information System (IRIS) program for fiscal year 2004, and has included lead as one of four substances selected for health assessment this year. The IRIS is an EPA database that contains the agency's scientific consensus positions on human health effects that may result from exposure to chemical substances in the environment The EPA has requested information from the public for consideration in the development of both qualitative and quantitative assessments. Completion of the IRIS assessment on lead is expected in fiscal year 2006 (U.S. Environmental Protection Agency, 2004).

The National Electronics Product Stewardship Initiative (NEPSI), an effort among manufacturers, recyclers, environmental activists, and State officials to reach a consensus on the shape of a nationwide electronics recycling system, has authorized several electronics manufacturers to draft possible legislation for the U.S. Congress to enact. According to the Electronic Industries Alliance (EIA), a coalition of trade associations participating in NEPSI, "[The envisioned] legislation will finance recycling programs through a fee at point of sale or allow companies to create alternative plans." However, the EIA stated further that "The difficult task ahead for industry is to reach consensus on the divergent views among companies." The risk of a stalemate among the manufacturers could be lessened by a California recycling statute passed in 2003. The possibility of numerous recycling structures imposed by different States is not likely to be looked on favorably by companies producing computers and televisions. California officials are currently drafting the details on enforcement of the State's new electronics recycling law. The law envisions payments of 48 cents per pound being directed to recycling companies, with 20 cents of the payment flowing through to "authorized collectors" that deliver defunct computers and televisions (Schaffer, 2004a, b). The cathode ray tubes (CRTs)

employed in color televisions and color computer monitors contain an average of 4 pounds of lead, distributed in the panel glass, funnel, neck, and glass frit of the CRT.

Update

Teck Cominco Ltd., Vancouver, British Columbia, Canada announced in late March that its subsidiary, Teck Cominco Metals Ltd., had terminated the declaration of *force majeure* on its refined lead contracts that it had instituted on February 25, 2004. The declaration had resulted from damage to the KIVCET lead furnace and boiler at the Trail (British Columbia) Metallurgical Operations caused by an explosion on February 2, 2004. Repairs at the Trail plant were completed in March, permitting inventories to be increased to a level where normal shipments could resume (Teck Cominco Ltd., 2004).

References Cited

CRU International Ltd., 2004, Market Commentary: CRU Monitor—Lead, March, p. 2.

Defense National Stockpile Center, 2004, Stockpile announces lead sales for February 2004: Fort Belvoir, VA, U. S. Defense National Stockpile Center news release, March 5, 1 p.

Schaffer, Paul, 2004a, California sweats details of e-cycling law: American Metal Market, v. 112, no. 6-4, February 12, p. 6.

Schaffer, Paul, 2004b, Electronics manufacturers tackle recycling programs: American Metal Market, v. 112, no. 7-1, February 17, p. 6.

Teck Cominco Ltd., 2004, Teck Cominco announces end to lead *force majeure*: Vancouver, British Columbia, Canada, Teck Cominco Ltd. news release, March 31, 1 p.

U.S. Environmental Protection Agency, 2004, Integrated Risk Information System (IRIS)—Announcement of 2004 program—Request for information: Federal Register, v. 69, no. 26, February 9, p. 5971-5976.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES[1]

(Metric tons, lead content, unless otherwise specified)

	2003		2004		
	January - December	January - February	January	February	January - February
Production:					
Mine, recoverable	449,000	73,900	33,400	32,400	65,800
Primary refinery	NA	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,120,000	176,000 r	91,900	90,200	182,000
Estimated	11,400 r	1,780 r	928	911	1,840
Recovered from copper-base scrap e	15,000	2,500	1,250	1,250	2,500
Total secondary	1,150,000 r	180,000 r	94,000	92,400	186,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	85,800 r	76,500 r	82,600 r	79,200	79,200
Imports for consumption:					
Ore and concentrates	6	--	--	NA	-- 2
Refined metal	175,000	29,200	13,000	NA	13,000 2
Consumption:					
Reported	1,350,000 r	226,000 r	116,000 r	115,000	230,000
Undistributed e	41,800 r	6,990 r	3,580 r	3,540	7,120
Total	1,390,000 r	233,000 r	119,000 r	118,000	237,000
Exports:					
Ore and concentrates	253,000	28,500	1,810	NA	1,810 2
Bullion	593	123	8	NA	8 2
Wrought and unwrought lead	123,000	13,200	13,200	NA	13,200 2
TEL/TML preparations, based on lead compounds	517	61	35	NA	35 2
Exports, gross weight, scrap	92,800	13,800	4,390	NA	4,390 2
Platt's Metals Week North American producer price (cents per pound)	43.76	43.60	46.86	49.41	48.14

eEstimated. rRevised. NA Not available. -- Zero.

[1]Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

[2]Includes data for January only: February data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	LME		Sterling exchange rate
	cents/lb	$/metric ton	£/metric ton	$/£
2003:				
February	43.63	475.4	295.66	1.607947
November	44.08	621.71	367.93	1.689739
December	44.30	691.69	394.89	1.751605
Year	43.76	514.62	313.88	1.634750
2004:				
January	46.86	757.95	415.21	1.825465
February	49.41	887.99	475.54	1.867295

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP[1]

(Metric tons, gross weight)

Item	Stocks January 31, 2004	Net receipts	Consumption	Stocks February 29, 2004
Battery-lead	20,800	89,800	92,700	17,800
Soft lead	W	W	W	W
Drosses and residues	1,420	3,200	3,150	1,470
Other[2]	1,130	1,710	1,680	1,160
Total	23,300	94,700	97,600	20,400
Percentage change from preceding month	XX	-4.7	+0.4	-12.4

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN FEBRUARY 2004[1]

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	61,000	--	--
Remelt lead	W	W	W
Antimonial lead	28,800	W	W
Other[2]	W	W	--
Total	90,200	39	337

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits.

[2]Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES[1]

(Metric tons, lead content)

Uses	2003		2004		
	January - December[r]	January - February[r]	January	February	January - February
Metal products:					
Ammunition, shot and bullets	51,600	8,680	5,600 [r]	4,260	9,860
Brass and bronze, billet and ingots	3,400	472	335	333	668
Cable covering, power and communication and calking lead, building construction	4,990	1,080	319 [r]	406	725
Casting metals	33,300	5,550	2,780 [r]	2,780	5,550
Sheet lead, pipes, traps and other extruded products	23,800	3,930	1,800 [r]	1,440	3,240
Solder	1,650	274	157 [r]	629	786
Storage batteries, including oxides	1,130,000	188,000	97,700	97,700	195,000
Terne metal, type metal, and other metal products[2]	15,200	2,540	1,270 [r]	1,270	2,540
Total metal products	1,270,000	211,000	110,000 [r]	109,000	219,000
Other oxides and miscellaneous uses	83,900	15,400	5,680	5,690	11,400
Total reported	1,350,000	226,000	116,000 [r]	115,000	230,000
Undistributed consumption[e]	41,800	6,990	3,580 [r]	3,540	7,120
Grand total	1,390,000	233,000	119,000 [r]	118,000	237,000

[e]Estimated. [r]Revised.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

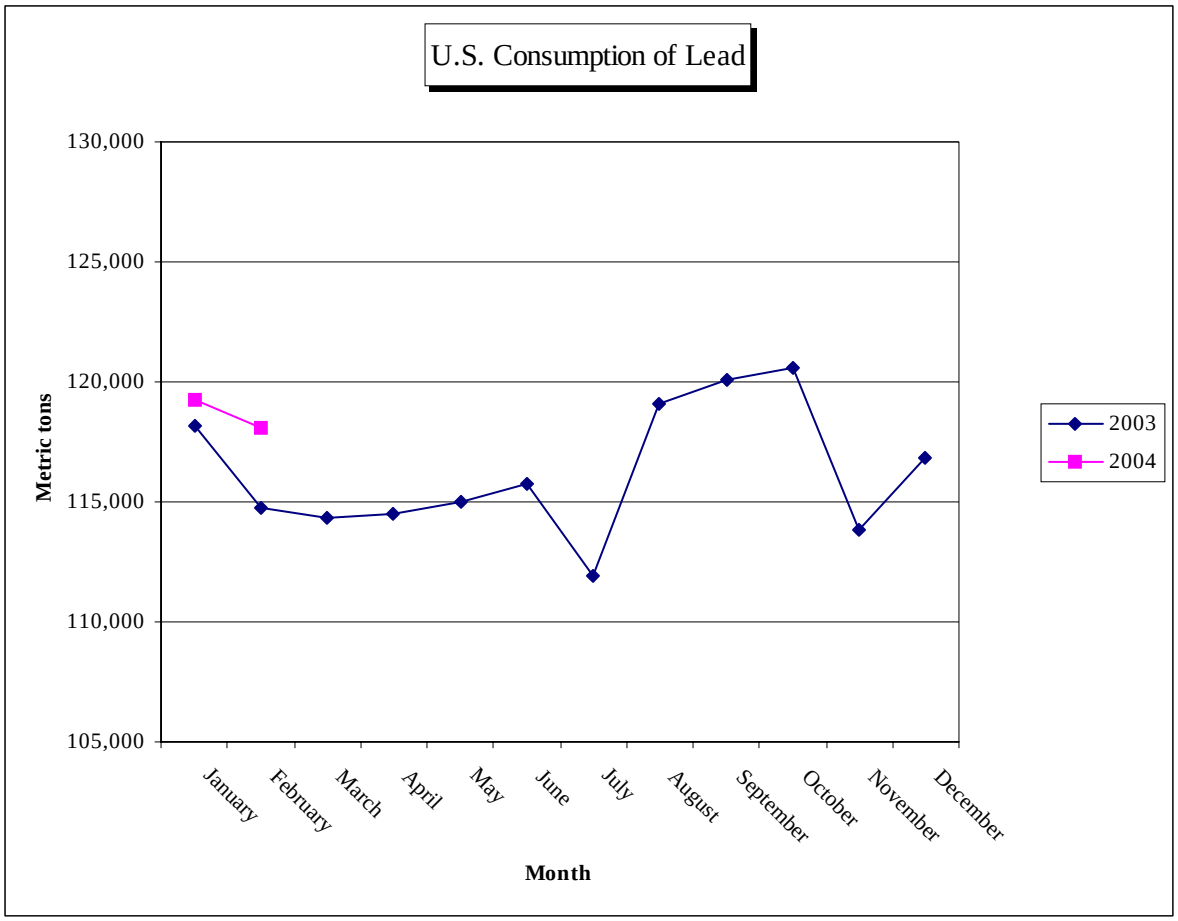

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS,
AND CONSUMPTION OF LEAD[1]

(Metric tons, lead content)

Type of material	Stocks January 31, 2004	Net receipts	Consumption	Stocks February 29, 2004
Soft lead	38,500 r	63,800	64,500	37,700
Antimonial lead	28,800 r	28,400	31,000	26,100
Lead alloys	W	18,800	18,800	W
Copper-base scrap	W	70	72	W
Total	82,600 r	111,000	114,000	79,200

rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS[1]

(Metric tons)

	2003		2004
	December	Year	January
Lead content:			
Ore and concentrates	7,150	253,000	1,810
Bullion	--	593	8
Materials excluding scrap	30,900	123,000	13,200
TEL/TML preparations, based on lead compounds	24	517	35
Total	38,100	377,000	15,000
Gross weight: Scrap	8,250	92,800	4,390

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8

U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN[1]

(Metric tons, lead content)

	General imports				Imports for consumption			
	2003			2004	2003			2004
Country of origin	Year	January	December	January	Year	January	December	January
Base bullion:								
Argentina	5	--	--	--	5	--	--	--
Germany	1	--	--	--	1	--	--	--
Total	6	--	--	--	6	--	--	--
Pigs and bars:								
Australia	10,100	--	--	--	107	--	--	--
Canada	167,000	13,900	13,400	12,300	167,000	13,900	13,400	12,300
China	1	--	--	2	1	--	--	2
Germany	--	--	--	--	--	--	--	--
Mexico	8,270	865	214	337	8,270	865	214	337
Other	259	3	50	381	259	3	50	381
Total	186,000	14,700	13,600	13,000	175,000	14,700	13,600	13,000
Reclaimed scrap, including ash and residues	--	--	--	--	--	--	--	--
Grand total	186,000	14,700	13,600	13,000	175,000	14,700	13,600	13,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.